



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,286	06/30/2000	John S. Hendricks	007412.00272	2646
71867 7590 11/25/2009 BANNER & WITCOFF, LTD ATTORNEYS FOR CLIENT NUMBER 007412 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051				
EXAMINER				
KE, PENG				
ART UNIT		PAPER NUMBER		
2174				
MAIL DATE		DELIVERY MODE		
11/25/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

09/609,286

**Applicant(s)**

HENDRICKS ET AL.

**Examiner**

SIMON KE

**Art Unit**

2174

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28, 29, 32, 37, 38, 44 and 48-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28, 29, 32, 37, 38, 44 and 48-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/C.3)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to communications: Amendment, filed on 7/15/09.

Claims 28, 29, 32, 37, 38, 44, 48-70 are pending in this application. Claims 28 and 37 are independent claims. In the Amendment, filed on 7/30/08, claims 28 and 37 were amended.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28, 32, 37, 44, 48, 50-59, and 61-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanier et al. US Patent 5,588,104 (Lanier I), in view of Lanier et al. US Patent 5,588,139 (Lanier II) further in view of Young et al. US Patent 4,706,121 (Young) Further in view of Hoarty US Patent 5,361,091.

As per claim 28, Lanier I teaches a method for placing virtual objects in virtual object locations in a video program comprising:

receiving at the a plurality of virtual objects; (see Lanier I; col.2, lines 47-63)

identifying at the at least one virtual object location for each frame of the video program; (see Lanier I, col. 2, lines 25-65)

Art Unit: 2174

selecting at the one or more of the plurality of virtual objects according to a set of placement rules and targeting information; (see Lanier I, col. 2, lines 25-65; col. 4 ,lines 10-35)

inserting at the one or more of the plurality of virtual objects into the identified at least one virtual object location during a display or storage of the video program; (see Lanier I; col. 3, lines 32-50) and

transmitting said video program to a targeted terminal. (see Lanier I; col. 4, lines 60-col. 5, lines 10)

However, he fails to teach storing the plurality of virtual objects in a database; Lanier II teaches storing the plurality of virtual objects in a database; (see Lanier II; col. 6, lines 20-65)

It would have been obvious to an artisan at the time of the invention to include Lanier II's teaching with method of Lanier in order to reduce network traffic.

They fail to teach a in a television program delivery system, Young teaches a in a television program delivery system, (see Young; col. 6, lines 15-45)

It would have been obvious to an artisan at the time of the invention to include Young's teaching with method of Lanier I and II in order to allow users to easily reduce the number of programs that are desired to watch.

However, they fail to teach head end creating a plan which includes rules for selecting based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers.

Hoarty teaches head end creating a plan which includes rules for selecting based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

It would have been obvious to an artisan at the time of the invention to include Hoarty's teaching with method of Lanier I, II, and Yound in order to allow the RF subscriber data processor apparatus of the present invention be compatible with any headend or terminal apparatus used for forward and downstream transmission.

As per claim 32, Lanier I, II, Young, and Hoarty teach the method of claim 31. Lanier I further teaches comprising adjusting the rules based on the recorded virtual objects watched data received from the terminal . (see Lanier I, col. 3 ,lines 5-20)

As per claim 37, Lanier I teaches an operations center located at a head end delivery system, comprising:

identifying a plurality of virtual object locations within each of a plurality of frames of a video program; (see Lanier I, col. 2, lines 25-65)

a virtual object selector for selecting at least one of the plurality of virtual objects according to a set of placement rules; (see Lanier I, col. 2, lines 25-65; col. 4 ,lines 10-35)  
and

Art Unit: 2174

a targeted virtual object management system for selecting at least one of the plurality of virtual objects according to targeting information and inserting the selected at least one of the plurality of virtual objects into the at least one virtual object location during a display of the video programs at a viewer terminal. (see Lanier I; col. 4, lines 60-col. 5, lines 10)

However, he fails to teach storing the plurality of virtual objects in a database;  
Lanier II teaches storing the plurality of virtual objects in a database; (see Lanier II; col. 6, lines 20-65)

It would have been obvious to an artisan at the time of the invention to include Lanier II's teaching with method of Lanier I in order to reduce network traffic.

They fail to teach a head end in a television program delivery system,  
Young teaches a head end in a television program delivery system, (see Young; col. 6, lines 15-45)

It would have been obvious to an artisan at the time of the invention to include Young's teaching with method of Lanier I and II in order to allow users to easily reduce the number of programs that are desired to watch.

However, they fail to teach head end creating rules based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers; and

Hoarty teaches head end creating rules based on measures of compatibility between image content surrounding that virtual object location and each of the different

Art Unit: 2174

groups of viewers. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

It would have been obvious to an artisan at the time of the invention to include Hoarty's teaching with method of Lanier I, II, and Yound in order to allow the RF subscriber data processor apparatus of the present invention be compatible with any headend or terminal apparatus used for forward and downstream transmission.

As per claim 44, Lanier I, II, Young, and Hoarty teach said one or more processor are further configured for adjusting the rules based on stored virtual objects viewed data received from the terminal. (see Lanier I, col. 2, lines 25-65)

As per claim 48, it is rejected under the same rationale as claim 28. Supra.

As per claim 50, Lanier I, II, Young, and Hoarty teach the method of claim 48. Hoarty further teaches the method comprising associating the terminal with one of the different groups of viewers, wherein the selecting is further based on the associating. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 51, Lanier I, II, Young and Hoarty teach the method of claim 48. Lanier further teaches wherein one of the virtual object locations moves spatially from one frame to a next frame in the sequence of frames. (see Lanier I; col. 4, lines 60-col. 5, lines 10)

As per claim 52, Lanier I, II Young and Hoarty teach the method of claim 48, wherein two of the plurality of virtual object locations are in different spatial locations

Art Unit: 2174

within a frame of the sequence of frames. (see Lanier I; col. 4, lines 60-col. 5, lines 10)

As per claim 53, Lanier I, II Young and Hoarty teach the method of claim 48.

Hoarty further teaches comprising:

storing viewer specific data, wherein the selecting is further based on the viewer specific

data. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 54, Lanier I, II Young and Hoarty teach the method of claim 48.

Hoarty further teaches wherein the outputting the video program is a first presentation of the video program, the method further comprising:

outputting the video program from the terminal as a second presentation of the video program with one of the virtual object locations displaying a different virtual object than displayed during the first presentation. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 55, Lanier I, II, Young and Hoarty teach the method of claim 54.

Lainer further teaches comprising: selecting the different virtual object for display in the one virtual object location based on receiving updated virtual objects. (see Lanier I; col. 4, lines 60-col. 5, lines 10)



Art Unit: 2174

As per claim 56, Lanier I, II, Young and Hoarty teach the method of claim 54, further comprising:

selecting the different virtual object for display in the one virtual objection location based on user specific data stored in the terminal. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 57, Lanier I, II, Young and Hoarty teach the method of claim 48, further comprising:

receiving a plan including rules for the selecting at the terminal, for each virtual object

location, the virtual object of the plurality of virtual objects to display in that virtual object location based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 58, Lanier I, II, Young and Hoarty teach the method of claim 57, further comprising:

adjusting the plan based on viewer specific data stored in the terminal. (see Hoarty, see figure 19, items 12 and 16, col. 17, lines 50-col. 18, lines 12)

As per claim 59, it is rejected under the same rationale as claim 28. Supra.

Art Unit: 2174

As per claim 61, it is rejected under the same rationale as claim 50. Supra.

As per claim 62, it is rejected under the same rationale as claim 51. Supra.

As per claim 63, it is rejected under the same rationale as claim 52. Supra.

As per claims 64-69, it is rejected under the same rationale as claims 53-58.

Supra.

As per claim 70, it is rejected under the same rationale as claim 28. Supra.

Claims 29 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanier et al. US Patent 5,588,104 (Lanier I), in view of Lanier et al. US Patent 5,588,139 (Lanier II) further in view of Young et al. US Patent 4,706,121 (Young) further in view of Further in view of Hoarty US Patent 5,361,091 further in view Esch et al. US Patent 5,283,639 (Esch)

As per claim 29, Lanier I, II, Young, and Hoarty teach the method of claim 28. Young fails to teach groupings and program categories thereby the targeted terminal stores information relating to the program categories of its group. (see Young, col. 12, lines 45-col. 13, lines 20)

They fail to teach method comprising generating a group assignment matrix and a retrieval plan for a plurality of viewer terminals including the targeted terminal, wherein the group assignment matrix comprises reception site.

Esch teaches method comprising generating a group assignment matrix and a retrieval plan for a plurality of viewer terminals including the targeted terminal, wherein

Art Unit: 2174

the group assignment matrix comprises reception site. (see Esch, col. 11, lines 60-65, col. 1, lines 30-40)

It would have been obvious to an artisan at the time of the invention to include Esch's teaching with method of Lanier I, II, and Young in order to allow users to easily reduce the number of programs that are desired to watch.

As per claim 38, it is rejected under the same rationale as claim 29. Supra.

Claims 49 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanier et al. US Patent 5,588,104 (Lanier I), in view of Lanier et al. US Patent 5,588,139 (Lanier II) further in view of Young et al. US Patent 4,706,121 (Young) Further in view of Hoarty US Patent 5,361,091 further in view of Colwell US Patent 5,303,361

As per claim 49, Lainer I, II, Young and Hoarty teach the method of claim 48. However, they fail to teach wherein the selecting is further based on a ranking of pairs of each virtual object with each of the different groups of viewers.

Colwell teaches the selecting is further based on a ranking of pairs of each virtual object with each of the different groups of viewers. (see, Colwell, col 2, lines 10-33)

It would have been obvious to an artisan at the time of the invention to include Colwell's teaching with method of Lainer I, II, Young and Hoarty in order to provide user with relative rankings.

As per claim 60, it is rejected under the same rationale as claim 49. Supra.

***Response to Arguments***

Applicant's arguments with respect to 28, 29, 32, 37, 38, 44, 48-70 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke  
/Peng Ke/  
Primary Examiner, Art Unit 2174